1:Lipkind E-5 (1937) 1948 SP9 Caraja SP9

ARCHEOLOGY

Large circular hollows in the ground are found at various points in *Carajá* territory, always in the close vicinity of a stream. By tradition these are ancient cemeteries; of old, they say, people did not mourn at a funeral but held a feast in the hollow. One of these hollows located on the height above the river bank at Fontoura is 18 m. (about 58 ft.) long, 15 m. (about 50 ft.) wide, and 1½ m. (5 ft.) deep at its center. The mound forming the northern side was excavated, disclosing two lines of burials with associated pottery, bone labrets, and beads.

The pottery is very similar to modern *Carajá* pottery and the labrets are exactly like those now in the possession of the *Carajá*. The cemetery cannot, however, definitely be identified as *Carajá*. The present-day *Carajá* cemetery is different in location and ground plan. There is now secondary urn burial, and in the first burial the bodies are laid at right angles to the river rather than parallel as were those disclosed by the excavation. Still, the remains show even less resemblance to the *Ge* and *Tupí* peoples in the neighborhood. The question must be left open for further archeological study.

HISTORY

Since the earliest times, the *Carajá* have been at war with their *Ge* and *Tupí* neighbors. The sole exception is the *Tapirapé*, with whom at one time the *Javahé* maintained close and friendly relations. The *Shambioá* were the first to come in contact with the Neo-Brazilians early in the 17th century. Contact with the *Carajá* proper must have begun shortly after the founding of Santa Anna by Bartholomeu Bueno in 1682. The *Carajá* are on good terms with the Neo-Brazilians, trading skins and fish for clothing, beads, knives, axes, guns, sugar, and salt.

Population.—According to the census made by the author in 1939, the *Carajá* number 1,510, divided as follows: *Carajá* proper, 795; *Javahé*, 650; *Shambioá*, 65. These figures should be contrasted with Castelnau's (1850–59) count in 1845 of 2,000 *Shambioá* in four villages, and his estimate of a total of 100,000 *Carajá*, and with Krause's (1911) estimate of 10,000 *Carajá* in 1908.

CULTURE

SUBSISTENCE ACTIVITIES

Farming.—Clearings are made in the thick forest along the watercourses. Gardens must be so located as to be accessible by canoe in the dry season and yet not flooded in the rainy season. The scarcity of such land results in some of the plots being several miles distant from the village. Proximity to fishing grounds is generally held to be more important. The work of clearing is begun in May at the beginning of the dry season. Maize

1:Lipkind E-5 (1937) 1948 SP9 Caraja SP9

is planted in September, when the first rains come, and manioc shortly after. There is little cultivation beyond weeding. The basic crop is manioc, both the sweet and bitter varieties being cultivated, with maize next in importance. Four varieties each of sweet and bitter manioc and 10 varieties of maize are cultivated. Other crops are: Five varieties of potatoes, two varieties of cara, four varieties of watermelon, three varieties of squash, four varieties of beans, and ten varieties of bananas, as well as peanuts, urucú, tobacco, cotton, calabashes, sugarcane, yams, peppers, pineapples, and papayas. Men do all the work with a little assistance in harvesting and weeding from older women. The *Javahé* are more industrious farmers than the other *Carajá*, cultivating extensive plantations.

Collecting.—A large number of vegetable products are gathered for use as food, medicine, and raw material for manufacture, but only a few are of great importance. The babassu and the buriti palms, used for food and textile materials, are among the most valuable. The taquara reed is sought after for arrows. Turtle eggs are a significant item of food during the dry season. Honey is indispensable for feasting.

Hunting.—Although the *Carajá* are passionate hunters, very few of the animals available in the region are eaten. Only the peccary is really sought and constitutes a sizable item in the larder. The other animals that are eaten—the cutia, coati, woodsdeer, monkey, iguana, and a few birds, such as the mutum, jao, and jacu—are killed when encountered but are not eaten by everyone. Peccaries are hunted in a communal drive, the most favorable time being shortly after the beginning of the rainy season when large droves are trapped on islands.

The chief purpose of hunting is to get feathers, and the most desirable birds are the various parrots, herons, the male stork, and the flamingo. The nesting of valuable birds is carefully watched, and the young are stolen and tamed. Feathers stored in small baskets almost constitute a currency, because they are readily negotiable at all times and maintain a stable value.

The principal weapons are the bow and club. The bow, made of a variety of woods but with a preference for juari when available, is round in cross section and about 6 feet (2 m.) long. The arrow is preferably of taquara reed and variously tipped with wood, animal bone, or fish bone. Clubs are beautifully fashioned of heavy hardwood, decorated with delicate carving, and are swung and thrown with equal skill. The lance is now used only for ceremonial purposes.

Fishing.—Fish is the most important food supply. Trapping and drugging fish with timbo is a communal affair; individuals fish with the bow and arrow. There is occasional night fishing, with spearing by torchlight. The pirarucu is killed by harpoon. The hook and line is little used, and apparently was borrowed recently from the Neo-Brazilians.

Food preparation.—Manioc is peeled, grated, squeezed out by hand, and cooked into a soup. When the soup cools, it is masticated for a few

121 /43/ Three years ago G. P. Murdock published his "World Ethnographic Sample." It goes without saying that an endeavor of this scope can only be incomplete. Now, as far as the Carajá, one of the nine tribes classified under the heading "Eastern Brazil," are concerned, the set of 30 characteristic features of this society in Murdock's attempt displays significant gaps and serious inaccuracies. It is my intention, here and now, to remedy this state of affairs as well as possible, in order to contribute from my side, while concerning myself with only one case among 565, to a fairer calculation of the human probabilities.

114 [122] [101] [127] To accomplish this task I shall use as a base the data that I was able to collect personally, in the company of my wife and aided by the National Swiss Foundation for Scientific Research, during the rainy season of 1954 to 1955 among the Carajá of the south, as well as, naturally, on the information from our predecessors in the field, Ehrenreich, Krause, Baldus, and Lipkind above all. I am using this opportunity to express the great regret that I feel every time I think of the fact that the rich materials collected by Lipkind have never been published in a satisfactory fashion. The Carajá, although they have been known for a long time, are basically misunderstood. To be fair, it must be added that they themselves do not make the task of investigators easy, and it goes without saying that under these circumstances my own contribution must remain fairly fragmentary in view of the too short period of our stay among them.

121 On the other hand I am convinced that the presentation of facts alone — allegedly pure facts — does not help us to become better acquainted with the human condition, and the second aim of my article is to present to you a first attempt at interpretation of the data concerning the Carajá kinship system, which, not without reason, was left blank in Murdock's attempt.

128 To facilitate the comparison I shall follow the framework of the columns of the "World Ethnographic Sample." The 433 462 [231] Carajá cultivate primarily tropical tubercles, although maize is not lacking; true domesticated animals are absent.

/43 cont./

241 433 462 is not lacking; true domesticated animals are absent. Planting is important as a source of subsistence, but fishing and turtle hunting stand higher in masculine preference as well as being a basis of life. Not only are the men charged with fishing and hunting — less important owing to the scarcity of game — but activity in the gardens is also primarily the business of the men, since the women are satisfied to help as they please, which is undeniably rare among the Amazonian Indians.

433 462 Up to here we are in perfect agreement with the categories chosen by Murdock (Ro, Im, Oo, Dm; columns 1-4). However, in column 5 we find the /44/ first gap. The division of labor assigns gathering to the female sex, except for the harvesting of wild honey, which is considered more as hunting and belongs among the men's tasks. So the Carajá could, after all, be put in the category of "standard division of labor by sex" (thus Ia; column 5).

114 Real difficulties arise when we take into consideration what is properly called social organization. Categorial decisions 36 [221] are not so easy to make there. It is true that our Indians live in compact villages, especially during the rainy seasons. During the rest of the year the Carajá proper like to disperse on the beaches, forming smaller local units, which, nevertheless, are always lined up along the river, the houses of the men (if there are any in the encampments) remaining at the rear, as if the periphery of a circle had been opened and rolled back in a straight line, leaving the center — the houses of the men — at 361 the side of the line. Since the large villages of the rainy season, 62 which are all like this and bear a name, are in reality agamous [114] and without clans, but display a certain tendency toward endogamy, the category assigned by Murdock — compact village observing agamy — (Va; column 6), if it is not definitely wrong, is nevertheless to be taken cum grano salis (tendency toward Sd).

59 As for the family structure, it is normally of the extended type, at least during the rainy season, but the extension is not

/15 cont./

226 Smaller fish are caught in weir baskets (adžuriă), larger ones in stockades or peculiar traps made out of vines (deaurărŏ) which do not know from personal observation.

433 Hunting, in contrast to fishing, plays a much lesser role than those who view all Indians as purely hunting peoples without 224 further ado are inclined to believe. Larger, huntable game is 262 quite sparingly represented in tropical South America and, in view of the lack of firearms, difficult to obtain. In addition, superstition often forbids eating the meat of precisely the largest and most common species. Thus, the Karaya scorn the tapir. Their principal booty is the monkeys common in all the forest along the shore, wild pigs, small rodents such as agoutis and pacas, and furthermore the small camprehe. In the lagoons and marshes of the patanaes the musk duck (Anas moschas) present in large numbers provides excellent food for them.

241 Agriculture. The great distance of the plantings from the villages prevented a visit to them. Judging by the wealth of [262] vegetable foods among the Šambioa, their agriculture seems to be on a relatively high level. The "savages" have in this respect outdone their civilized neighbors by far. In general, [177] iron agricultural implements have already supplanted the original ones.

The most important cultivated plant is manioc, of which both the more nourishing poisonous species (M. brava) and the less productive, but immediately edible aipim (M. mansa) are grown. The freshly cleared, dry forest soil of the higher banks is especially suitable for this kind of cultivation.

[273] Next, maize comes into consideration as a grain product, which is used less in substance than for the production of fermented beverages.

Sugar cane flourishes on the lower shore-land. During the dry season one sees the seedlings planted on the sandbanks [249] everywhere for the next season. Special devices for pressing out the juice are not in use.

Of the legumes there is found among the Šambioa small brown beans (Dolichos chinensis), as well as peas (komonara) imported from Pará.

/15 cont./

241 Cara tubers /Dioscorea/ are grown in large quantity, excellent quality, and in various species. Most commonly one sees the huge egg-shaped pé d'anta (Cara brasiliensis) with a white cut-surface, as well as a smaller one with an almost violet cut-surface.

[242] The wild food plants and fruits which the river forests and camp-woods supply constitute a desirable change. These are primarily palm fruits, such as the nuts of the uaguassú, the pineapple-like fruits of the buriti (Mauritia vinifera), and various small species of coconut; furthermore, the wild acaju tree, the jaboticaba, the pitanga /Surinam cherry/ the oily piquia (Caryocar brasiliense), various Bromeliaceae, and, finally, the finest fruit of the campos, the mangaba (Hancornia speciosa). One sees the latter, however, much more rarely than in the Xingu villages. The tree does not seem to be planted as it is there.

[239] It is noteworthy that the orange, which flourishes extremely well here, is not cultivated, although the Indians esteem it most highly. Only rarely do they undertake week-long journeys to the Brazilian settlements to trade for these fruits. A principal goal of such excursions is the site of the old, now abandoned mission and military post Chambioas, just above the rapids of S. Miguel, where rather large stands of this noble tree have maintained themselves. Cacao, too, was formerly obtained from there.

Still to be mentioned is the honey of the countless species of wild bees, the collecting of which presents no difficulties since the animals are entirely stingless. The black wax, which [237] is stored in large, round, inch-thick disks, is used in Indian industry as a glue.

249 The only luxury item of the Karaya is tobacco (koti). It is a Nicotiniana, but not N. tabacum, of a mild quality. The dried leaves are stored (see p. 40) in large rectangular packages plaited out of palm-leaf strips and are pulverized between the hands for use. /16/ The fruit capsule of the jequitiba tree (Hymenaea sp.), filed smooth on the outside, serves as a pipe

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/Ill. 12 appears on p. 145./

Ill. 12. Planting of the Karajá on Bananal. Drawn from a photograph.

5: Krause--30 E-5 (1908) 1911 SP9 Caraja SP9

/241 cont./

222 262 gathered at the beginning of October. Of other fruits Ehrenreich mentions: caju /acajou/, jabuticaba, pitangu, and Bromeliaceae, and Königswald also the mangaba. I never saw these fruits in the villages, however. As vegetable plants there are eaten: mormão (dãdẽdãlĩ), which is gathered the end of October; on the other hand, the mandioca do matto (ãzõ) is supposedly not eaten, because it is too poisonous.

241 262 The following food plants are cultivated: the poisonous (ãndjĩũlã) and the sweet (ĩ(ĩ)ĩũ) manioc; four varieties of maize, mãĩ, dõlĩmẽ with large, round kernels, ĩzẽlãlã with round kernels, mãĩdũzõ with red kernels; batatas (kõdẽrũtĩ), and cara (kãrã). Of fruits, bananas are probably cultivated. The green banana is called jãdaũãbõ, the ripe one jãdãzõ. I obtained bananas in Indian villages only twice, and, indeed, at the beginning of July; I never saw any in the plantings. Perhaps bananas occur only here and there, for example, according /242/ to the statements of Brazilians, among the Šavajé on Bananal Island, which is supposed to have been named after them. I did not see oranges (nãlãdjã) anywhere. Of other fruits Königswald also lists: gourds, watermelon, pineapple, and sugar cane (mã(ĩ)ĩtĩ). The gourd is not eaten, but used only for the making of vessels; the watermelon is generally gathered in the wild state, probably only rarely cultivated; only once in a village of the south horde, did I meet a family who stored seeds of these plants in small bast packets. Pineapple is surely not cultivated, and I did not see sugar cane either. If they had had any, they would probably not have begged me for sugar to the extent that they did. The statement of Ehrenreich that during the dry season sugar-cane shoots are planted on the sandbanks should be corrected to read manioc and maize stalks.

[124] [114]

241 Of spice plants, peppers (kãšĩwẽrã), of plants for enjoyment, tobacco (kõtũ), are cultivated.

Moreover, one finds in the plantings: as industrial plants, cotton and gourds; as plants used in ornamentation, ĩšĩũlã shrubs (for necklaces) and the urucú shrub; and a quantity of medicinal plants.

/242 cont./

241 [821] The time for laying out the planting is approximately September to October; it is called bõlɨ̆hũ̆ã̆ (1). It is regulated by

1. = Southern Cross?

the Pleiades (bõlɨ̆obɛ̆dɔ́ = parakeets): if it is low, manioc is planted; if it is somewhat higher, maize is planted. Cotton, batatas, and urucú are not planted until much rain falls, in other words, about November and December. These statements of the Indians coincide with the fact that I often found them absent from the village in October; they were sometimes days distant, in order to lay out the planting. Tall columns of smoke indicated in which direction they were doing this. The planting is usually laid out at a great distance from the village, on flood-safe high banks. As far as possible, the Indians ride there in a boat, but then they often still have long land marches to overcome before [311] they reach the planting. Recently they have begun laying out their plantings in the interior of Bananal Island, because the [361] harvests are supposed to be very good there. One chief, Korumaré, has already moved permanently to the inland river of Bananal. On the ninth of October I did not meet Chief Fotuna in his village; he had traveled two days inland to Bananal in order to prepare a new planting there. Apparently other villages were also considering the plan to betake themselves into the interior of Bananal later on.

The plantings are laid out by the married men, but the male youth seems to help. The underbrush is cut down; the tall forest [412] trees are stripped of their branches and then felled, which was formerly done with stone axes, but is now done with iron axes. [313] Larger timber is brought to the village as firewood, /243/ and the rest is burned as soon as it is dry. Then, between the fallen trees, small, low round beds are laid out, in which are planted three manioc stalks, set in a triangle with their twigs interlaced at the top (Ill. 12). For digging, heaping up the beds, and cutting in the holes for the plants a spade-like implement (mãũ̆lɛ́ or ĭdjɔ̃lɔ́) is used. It consists of a thick stick that is pointed at one end and at the other runs out into a shovel (Ill. 83). The shovel serves to lift

/243 cont./

241 out the earth and heap up the beds, the point to loosen the earth, make holes, and lift out the roots. How the rest of the plants are planted is unknown to me; in the plantings ripe for harvest which I wandered through, they seemed to stand jumbled together. They grew so close together that it was hardly possible to pass through on the narrow path. In view of the height of the growths (three to four meters) a survey was not to be had, in contrast to the plantings of the Kayapó, which was laid out very clearly and in which the individual vegetables were planted in groups.

[462] The division of labor in the planting is such that the men lay out the planting and plant manioc and cara, while the planting of cotton, maize, batatas, and urucú is said to be the duty of the women.

The plantings are apparently so laid out that the families or the villages plant in one clearing; a separation within the planting according to families was not discernible, but nevertheless seems to exist.

Everyone works his plot himself; brothers usually work together. If one of them becomes [465] ill, a relative steps in for him. In this case, or if other assistance is required, the yield from the harvest is either divided into two parts or the helper is paid in arrows, pots, lances, net coverings, axes, spun cotton, etc. If widows [736] have grown sons, they plant for them; otherwise she asks the chief to have someone plant for her. He then appoints one of the villagers to take over this duty and pays him for it.

Ill. 83. Planting implement of the Karajá.

The plantings are not protected against damage. They lie in the midst of the forest, without any kind of enclosure, so that animals, especially pigs and birds, do a great deal of damage. These harmful animals are pursued; the birds above all are chased away by cries.

/243 cont./

241 With the ripening of the foodstuff, the harvest begins. It is not gathered all at once, but rather every two or three days the foodstuffs required for this period are brought in. There are seldom larger supplies on hand in the village. This custom is a great [K09] obstacle for a longer stay in the villages, for the Indians /244/ do not leave the villages during the stay of strangers (1), but use up

1. Fonseca already observed this custom in 1773. The Karajá had but little food, because the Chavánte had plundered their plantings and the Karajá therefore did not dare go to their plantings. Nor did they dare go hunting or fishing in Fonseca's presence, nor set out for their plantings with Fonseca's soldiers for fear that he might enter their villages in their absence, which they had refused him up to that time. Rev. trim. 8, p. 385.

their supplies, so that after two days there is nothing more on hand, and the stranger must either donate food or go along to the planting or else depart.

241 285 482 [962] Harvesting is generally done by the women. The harvest is packed into large back-baskets (bĕhūlĕ), which are plaited out of two palm fronds in such a way that the ribs form the two longitudinal poles, and the same sides of the fronds, firmly plaited together, form the bottom, while the other sides, plaited by themselves, make the lattice-like edge (Plate 57, Ill. 1; the back-basket is 116 centimeters long, 34 centimeters wide, and 17 centimeters high). Sometimes the lower edge of the back-baskets is likewise firmly plaited (Plate 57, Ill. 2). The back-basket is worn on two shoulder bands and a forehead band of strong bast. It projects very high above the head, and under the heavy burden people walk with the upper part of the body bent far forward and the knees bent, usually leaning on a staff (Plate 15, Ill. 3). The contents are secured with wide bast bands which are laced across the load from edge to edge.

-/281 cont./

824 Most of all, the Indian exploits the vegetable kingdom, and here he has also gone over to the cultivation of plants useful to him. He already has at his disposal, of course, many useful wild plants in the way of trees (leaf trees, palms), shrubs, varieties of cane, etc.

Almost all parts of the plants are utilized, in each case, of course, only certain ones: wood, bark, leaves, stem, bast, [241] blossom. Of plants whose fruits are used technically, the following are planted: /282/ gourds, cotton, urucú. The gluing ma- [314] terials, with the exception of wax, are taken exclusively from plant resins.

324 412 In the following, the processing and utilization of the individual raw materials will be described.

D. Stones are used above all as stone axes. The material for them is chiefly granular diabase or diorite. Nothing is known about how they are made. At the present time they serve only as striking stones for the preparation of bark cloth and for cracking nuts. Apparently they all come from the Rio Tapirapé, as well as from the mountains north of it, and are perhaps not even made by the Karajá themselves, but acquired from the Tapirapé through trade. In shape, there are flat axes and axes with a shaft groove (Ills. 100-102). As a nutcracker I found a stone apparatus consisting of stone base and small hammer, which, in shape, is quite peculiarly suited for this. Through long use a smooth, round hollow was produced in the slightly convex striking surface of the hammer (Ill. 99). Such stones are said to come from the cachoeira /cataract/ near St. Maria. The small stone knives which are used for tattooing are made anew each time out of the flint rubble of the sandbanks by splitting the flint with a stone or iron ax and using the sharpest splinters without any further treatment (Ill. 52b). Nothing is known about the making of the long stone lip plugs (Ill. 62). Allegedly they are struck into shape with [439] stones. The Karajá do not make them themselves, but barter for them with the Tapirapé.

6:Cook M-3,4 (ca. 1900) 1909
SP9 Caraja SP9

Morning having come, the remainder of our flotilla soon appeared, and the Karayá became more and more friendly. We induced a few of them to go to their little cornfield across the river to get us some green corn and pumpkins. While awaiting their return, we were entertained by another exciting event. One of two or three Karayá men who were insane and haunted the wilds distant from the village, which they made an unwelcome visit to from time to time, suddenly appeared. Nearly all the men of the village were absent, having scattered off to hunt and fish, as is their custom. When the lunatic burst suddenly into view, the women and children were instantly stricken with panic. Amid wild shouting and screaming, chattering and jabbering, a grand rush was made for the canoes, of which there is one for each family; and as the women ran they caught up the children that were too young to care for themselves, and also grabbed up clay pots and other destructible objects, tumbled everybody and everything into the dugouts, then paddled frantically out into the stream. Soon, the mad savage came into the encampment, armed with a large bow and arrows and a heavy killing club; and amused himself by entering the huts and emerging through the roof; or, entering by breaking through the roof and passing out through the established opening. And while going from hut to hut, he shattered clay pots and pans with a heavy blow from his club, besides slaying parrots and macaws in the same manner. As he took turns around the village, he shot his arrow again and again high in the air in advance, taking it up each time as he arrived where it fell. Seeing him doing this, and fearing that we might become a target for his archery, we followed the example of our savage brethren and pushed out into the stream. But he did not appear to take any notice of us, nor of any one, and seemed to be continually muttering and moaning. He did not stay long in the village but was soon swallowed up again in the forest, and the chattering, jabbering, excited horde in the canoes returned to shore.

6:Cook M-3,4 (ca. 1900) 1909
SP9 Caraja SP9

not afflicted. Therefore, they have hidden their villages far away from the slimy trail of the only "civilization" they know, and do not wish to reveal their location. But they, too, well know the great superiority of steel implements over their stone utensils, so desire to obtain them, which they do indirectly through the Karayáhy. They are not unwise in their generation. They do not desire to receive, in its entirety, the "civilization" available to them, for it has been demonstrated to them that its evils outweigh its blessings. Therefore they try to catspaw civilization's good things and leave its evil things. What a pity it is that a civilization, which is the best fruit of the Gospel of Christ, should not have reached the Karayá!

The Sambiõa live in much larger, cleaner, and more orderly villages than the Karayáhy, and are better fed. They also build better huts than the Karayáhy, and arrange them in regular streets. They have four large villages, located between Pau de Arco and the falls of S. Miguel. They trade hammocks, vegetables, fruits, fowls, and other produce for such articles made by civilized men as they desire. As regards agriculture, they are but little behind the semi-barbarous Brazilians of the far interior. They have many slaves, which are women and children stolen from other tribes with whom they were at war.

Only the inhabitants of the second Sambiõa village are hostile to strangers. When such appear at their port, the women and children are sent to a safe place, while the warriors, fully armed, assemble at the water's edge and assume a threatening attitude. It is necessary to be cautious in approaching them, though they dare not attack a large canoe full of men armed with repeating rifles. They greatly fear these weapons, believing that the rifleman can continue to fire indefinitely without reloading. The villages are always situated distant from the landing-place; and though they will allow the traveler to visit them, he must be on his guard.

The reception at the landing is interesting and exciting. The naked, bronze-bodied men are assembled in force. Many

6:Cook M-3,4 (ca. 1900) 1909
SP9 Caraja SP9

dant, and to the pecari, the aguti, the musk duck which is found in ponds, and similar small game. 224

Agriculture among the Sambiôa is highly developed—remarkably so, in fact, for a people living in a state of savagery—and is even more advanced in some respects than that of the "civilized" Brazilians living near their territory. A large assortment of vegetable foodstuffs are raised. They now have the same agricultural implements as the "civilized" Brazilians, having relegated to oblivion their rude tools of ancient times, with which they could not till the soil but to a very limited extent, and that only with excessive toil. The high agricultural development reached by these savages is very interesting and important, proving conclusively that the primitive man, far from being incapable of anything but to wander over a wide territory, living from hand to mouth by hunting and fishing, is capable of becoming an agriculturist of no mean order. The plant most extensively cultivated by the Sambiôa is the manioc. They raise both kinds, the "wild" and the "tame." Next to this in importance is corn. But this is used more to make a fermented drink than for food. Sugar-cane is also cultivated on the low, alluvial soil along the river, which is well adapted to this purpose. But the natives have no suitable contrivance for extracting the juice from the cane. Several varieties of small, brown beans, brought from Pará, and which are a staple food among civilized Brazilians, are also raised. So also, the white and violet Brazilian *cará*, a kind of potato. Besides these foodstuffs, which were obtained originally from civilized Brazilians, the Karayá gather from forest and jungle, many kinds of wild fruits and vegetables, which introduce a pleasing change in their aliment. A few such are the cajú, a yellow, olive-shaped plum, which grows on a very large tree; the jábádacába, a plum which grows clinging to the trunks of a tree resembling the elm; the morisy, a large yellow cherry, groves of which may be seen growing on the uplands; mongába, the fruit of a kind of upland rubber tree, which I have elsewhere called a natural baked apple; and

241 [178] [273] [262] [177] 272 262

Brazil.

252 Fish and game are sometimes prepared for eating by cooking in a clay pot; but the usual method is to impale the meat on a stake which is set up in the ground by the camp-fire and inclined over it; or else to place it upon glowing coals and allow it to remain there until the outside is burned to a [263] crisp. As a portion of this crisp part is naturally reduced to ashes, a saline substance is produced, which, mingling with the juice, flavors the meat. Various root foods, and also ears of corn, are prepared for eating by roasting over the fire.

317 Besides the ash salts just mentioned, the Karayá contrive [263] to extract a little sodium chloride from certain earth banks which contain a small percentage of this substance. It is only recently that they have begun to use salt obtained from the civilized world. Banks of saline earth are easy to locate as the wild beasts frequent these places to "lick." In the cattle-raising regions, a herdsman is much pleased to have one or more of these briny spots in his territory so that his cattle may thereby obtain salt.

184 "The poor tame brothers" of the Sambiõa, the Karayáhy [241] branch of the family, though they are supplied to a limited extent with axes and grubbing hoes, do very little planting. [231] Neither have they many domesticated creatures. Those they do have are largely birds of the parrot family, which they regard with affection, though their feathers are plucked to be used in ornament making.